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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/732,879

12/11/2000

Sture Roos

2483-27

2176

7590

09/21/2004

NIXON & VANDERHYE P.C.

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EXAMINER

ZHENG, EVA Y

ART UNIT

PAPER NUMBER

2634

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/732,879

Applicant(s)

ROOS ET AL.

Examiner

Eva Yi Zheng

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-34 is/are allowed.
- 6) ☒ Claim(s) 15-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. The Examiner's Objection to Specification has been withdrawn due to amendment.
2. The Examiner's Objection to Abstract has been withdrawn due to amendment.
3. Applicant's arguments with respect to amendment claims 15-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

4. The drawings are objected to because on Fig. 1 and Fig. 2, block 65, "line cord" should be --line card--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 15, recitation: "an apparatus in a telecommunication system for providing access to telecommunication services to subscribers at user terminals, each of which being separately connected to at least one access point via a net terminal including an xDSL modem, and a communication network, wherein" is confusing and unclear for which part of telecommunication system the "wherein" refers to.

7. Claim 15 recites the limitation "the access point modems" and "the required access point filters". There is insufficient antecedent basis for these limitations in the claim.

8. Claim 17 recites the limitation "the station side". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHale et al. (US 6,014,431) in view of Norrell et al. (WO 99/18712).

a) Regarding claim 15, McHale et al. disclose an apparatus in a telecommunication system for providing access to telecommunication services to subscribers at user terminals (12 in Fig. 1), each of which being separately connected to at least one access point via a net terminal including an XDSL modem (30 in Fig. 1), and a communication network, wherein:

the at least one access point comprises XDSL modems (510 in Fig. 10A) and XDSL filters (508 in Fig. 10A),

the access point modems are arranged in a pool of a plurality of XDSL modems (510 in Fig. 10A);

the required access point filters connected to the access point modems are arranged in a pool of a plurality of filters (508 in Fig. 10A);

a controller (80 in Fig. 10A) is adapted to control modems and filters during establishment of a connection between the user terminals and the at least one access point whereby a connection for bi-directional broadband data transmission is created (86 in Fig. 10A).

McHale et al. disclose all of the subject matter as described above except for the specific teaching of an in-band modem in the net terminal for transfer of information.

Norrell et al. in the same field of endeavor, teach a combined xDSL and PSTIN modem in signal processing system (30 in Fig. 2).

A combined xDSL and PCM modem alleviating redundancy in processing equipment, reducing cost, and requiring fewer subsystems to interconnect (Norrell et al., abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute the combination PSTN-DSL modem by Norrell et al. with the subscriber unit by McHale et al. in order for better modulation and demodulation of digital signal processor performance.

b) Regarding claim 16, McHale et al. disclose an apparatus in a telecommunication system according to claim 15, wherein:

the controller is adapted to retrieve subscriber information to individualize the established connection (Col 8, L17-33).

c) Regarding claim 17, McHale et al. disclose an apparatus in a telecommunication system according to claims 15, wherein the pool of filters is connected directly to the station side of a first access node (508 in Fig. 10A).

### ***Allowable Subject Matter***

11. Claims 20-34 are allowed.

12. The following is an examiner's statement of reasons for allowance:

None of the prior art suggest or teach a telecommunication system comprise a controller coupled to an access point and configured to control a first xDSL modems and a second xDSL modems to establish a bi-directional broadband connection between one of the user terminals and the access point, wherein prior to established of the bi-directional broadband connection, the in-band modem in the net terminal associated with the one user terminal is configured to established a preliminary communication with the controller to initialize one of the second xDSL modems for the bi-directional broadband connection.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Yi Zheng whose telephone number is (571) 272-3049. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-879-9306.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

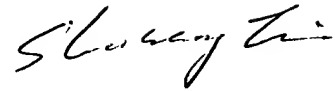


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Eva Yi Zheng  
Examiner  
Art Unit 2634

September 8, 2004

A handwritten signature in black ink, appearing to read 'Shuwang Liu', written in a cursive style.

**SHUWANG LIU**  
**PRIMARY EXAMINER**